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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,753	08/25/2003	Hirokazu Kameyama	Q77095	1291

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EXAMINER

SMITH, JEFFREY S

ART UNIT	PAPER NUMBER
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2624

MAIL DATE	DELIVERY MODE
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10/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/646,753

Applicant(s)

KAMEYAMA ET AL.

Examiner

Jeffrey S. Smith

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-98 is/are pending in the application.
- 4a) Of the above claim(s) 1-85 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 86-98 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Requirement for Information

Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

The requirement to disclose any change in the status of Japanese Application Number 2002-185874 filed in Japan on June 26, 2002 and published as Publication Number 2004-030252 on January 29, 2004 continues until the issue fee is paid. Also the requirement to submit each rejection made in this Japanese application continues until the issue fee is paid. The requirement to disclose any change in status and to submit each rejection of another foreign filed application that claims priority to Japanese Application Number 2002-185874 filed in Japan on June 26, 2002 continues until the issue fee is paid.

Information Disclosure Statement

The information disclosure statement filed in the remarks of the amendment filed September 20, 2007 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next

Art Unit: 2624

to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

The listing of references in the remarks is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Appropriate correction is required.

The amendment filed 9/20/2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "whose value increases or decreases in correspondence to a reference level of the similarity" is new matter. Also, "whose values increase or decrease in correspondence to a reference level of the

Art Unit: 2624

similarity" is new matter. Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 86-98 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The element "whose value increases or decreases in correspondence to a reference level of the similarity" is new matter. Also, "whose values increase or decrease in correspondence to a reference level of the similarity" is new matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 87-88, 90-91, 93-94 and 98 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 87 recites "said desired frame is partitioned into a plurality of areas" and claim 88 recites "said desired frame is partitioned into a plurality of subject areas that are included in said desired frame." The distinction between a "plurality of areas" and a "plurality of subject areas" as recited in claims 87 and 88 is not defined. In other words, a "plurality of areas" of a frame includes a "a plurality of subject areas." This is supported by new claims 95-97 which define the plurality of areas as a plurality of subject areas. This means that "a plurality of areas" of a frame is a "plurality of subject areas," therefore claim 88 contains the same limitations as claim 87, and is identical to claim 87. Claim 90 is also identical to claim 91, and claim 93 is identical to claim 94.

Claim 98 is identical to claim 89 and adds no further limitation. Both claims obtain a weighting coefficient whose value increases or decreases in correspondence to a reference level of similarity for at least one frame which is before or after the desired frame. The phrase "at least one frame which is temporally before and one frame which is temporally after" still is only one frame as stated in the rest of claim 98.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 92-94 and 97 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims recite a program per se, which is non-statutory subject matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 86-98 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Unexamined Patent Publication No. 2000-354244 by Nobutaka ("Nobutaka").

For claims 86, 89, 92 and 98, Nobutaka discloses computing a similarity between said desired frame and at least one frame which is temporally before and after said desired frame (which is performed by element 102 of figures 1 and 2); and acquiring said processed frame by obtaining a weighting coefficient that becomes greater if said similarity becomes greater (which is performed by elements 202, 205 and 206 of figure 2, see also the discussion of similarity on page 7), then weighting said at least one frame with said weighting coefficient, and synthesizing said weighted frame and said desired frame (which is performed by element 106 of figure 1 which is a synthesis means that synthesizes the desired frame and the weighted frame), as discussed at paragraph 458 of the application.

For claims 87, 90 and 93, Nobutaka discloses said desired frame is partitioned into a plurality of areas (see figures 6a, 6b and 13 for example); said similarity is computed for each of corresponding areas in said at least one frame which correspond to said plurality of areas (see discussion of 102); and said processed frame is acquired by obtaining weighting coefficients that become greater if said similarity becomes

greater, then weighting said corresponding areas of said at least one frame with said weighting coefficients, and synthesizing said weighted areas and said plurality of areas (see discussion of 106), as discussed at paragraph 466 of the application.

For claims 88, 91 and 94 Nobutaka discloses said desired frame is partitioned into a plurality of subject areas that are included in said desired frame (see figures 6a, 6b and 13 for example); said similarity is computed for each of corresponding subject areas in said at least one frame which correspond to said plurality of subject areas; and said processed frame is acquired by obtaining weighting coefficients that become greater if said similarity becomes greater, then weighting said corresponding subject areas of said at least one frame with said weighting coefficients, and synthesizing said weighted subject areas and said plurality of subject areas (see element 106), as discussed at paragraph 466 of the application.

For claims 95, 96 and 97, figure 2 of Nobutaka discloses a motion vector is computed for each area of said plurality of areas; said areas are grouped into a plurality of subject areas based on said motion vector of each area of said plurality of areas; said similarity is computed for each of corresponding subject areas in said at least one frame which correspond to said plurality of subject areas; and said processed frame is acquired by obtaining weighting coefficients whose values increase or decrease in correspondence to a reference level of the similarity, then weighting said corresponding subject areas of said at least one frame with said weighting coefficients, and synthesizing said weighted subject areas and said plurality of subject areas, as discussed in paragraph 480 of the application.

Response to Arguments

Applicant's arguments filed 9/20/2007 have been fully considered but they are not persuasive.

Applicant states that "no Office Action has been received for Japanese Application No. 2002-185874, or another foreign filed application that claims priority to Japanese Application No. 2002-185874." The requirement to disclose any change in status of Japanese Application Number 2002-185874 filed in Japan on June 26, 2002 and published as Publication Number 2004-030252 on January 29, 2004 continues until the issue fee is paid. Also, the requirement to disclose any change in status of another foreign filed application that claims priority to Japanese Application Number 2002-185874 filed in Japan on June 26, 2002 continues until the issue fee is paid.

The new claims 95-97 correspond to the tenth embodiment shown in figure 39. Therefore claim 89 is generic to embodiments 8-10 and is not generic to the other embodiments for the reasons given in the previous Office action, for the fact that applicant in the specification identified these as separate embodiments, for the fact that applicant has not argued that the withdrawn species are obvious variations of the elected species, for the fact that the withdrawn claims are not presented as claims that depend from claim 89 to further limit the alleged generic claim 89 by making the generic elements more specific (in which case the claims that depend from claim 89 would not receive a foreign priority filing date for the reasons given in the previous Office action), and as evidenced by the fact that applicant felt obliged to file six applications in Japan.

The prior objection to the drawings has been overcome by the new drawings.

The title of the invention has been amended to be even less descriptive than the original title. Furthermore, the words "Computer Program" must be removed from the title because a computer program is never an invention. If applicant fails to properly amend the title the Examiner will amend the title if this application is ever in condition for allowance, MPEP 606.1.

The "plurality of areas" and the "plurality of subject areas" are patentably identical. Applicant argues that an example of a difference is disclosed in several of the figures and in some pages of the specification. However, the figures are not considered claim elements. Similarly, the specification is not considered a claim element. Therefore, the claim elements speak for themselves and are interpreted to mean exactly what they say.

The computer program claims are still non-statutory. A computer program is not statutory subject matter. Any claim for a computer program will be rejected. The claims should be amended to recite "A computer readable medium storing a computer program which, when executed by a computer processor, causes the computer processor to perform a method comprising."

Claims 86-94 have been rejected under 35 USC 102(b) as being anticipated by Japanese Unexamined Patent Publication No. 2000-354244 by Nobutaka. Applicant responds to this rejection by citing portions of U.S. Patent Number 6,804,419 that do not contain the claim elements. The U.S. Patent cited by applicant has not been cited in an information disclosure statement, nor has this patent been cited in an Office action.

Therefore, this patent is not part of the record and all arguments that are based on this patent are not entered. If applicant wants this patent to be considered, applicant has to file an information disclosure statement listing this patent.

Applicant is expected to respond to the rejection that has been made, and not to a rejection that has not been made. In other words, applicant has to respond to the rejection of the claims as anticipated by the Japanese Unexamined Patent Publication, not as anticipated by a reference that is not of record. Applicant is held to understand the material portions of a reference that are in applicant's native language, and is required to provide a translation of the material portions. The material portions of this publication that have been translated by applicant are included in the application at paragraphs 458, 466 and 480. The translated portions in these paragraphs state that the processed frame is obtained by multiplying interpolated frames that are temporally before and after the reference frame with contributory degrees, or weighting coefficients, having values that are made greater if the similarity is great. Therefore, applicant's subsequent arguments denying that the Japanese Patent Publication discloses this claim element is contradictory to applicant's previous statements and conflicts with the disclosure of the Japanese Patent Publication as stated in the above rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent Number 7,085,323 issued to Hong discloses a

weighting factor that is great when the similarity is great, then weights at least one frame with the weighting coefficient and synthesizes the weighted frame and the desired frame as discussed in columns 6 and 7.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey S. Smith whose telephone number is 571 270-1235. The examiner can normally be reached on M-F.

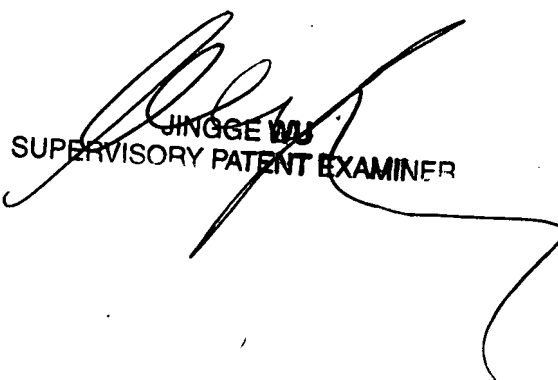
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JSS

October 4, 2007


JINGGE WU
SUPERVISORY PATENT EXAMINER